



National Transportation Safety Board Aviation Accident Final Report

Location:	San Juan, PR	Accident Number:	MIA07LA086
Date & Time:	04/28/2007, 0806 AST	Registration:	N407AT
Aircraft:	Aerospatiale ATR 72-212	Aircraft Damage:	None
Defining Event:		Injuries:	1 Serious, 2 Minor, 50 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

The Captain made the announcement to prepare for the approach to land at San Juan, Puerto Rico, he alerted the flight attendants of the possibility of encountering turbulence, and asked that everyone remain seated. After initiated the descent the airplane entered a broken layer of clouds, encountering light turbulence, followed by a momentary "jolt" of turbulence. As the airplane encountered the momentary "jolt", both flight attendants who were walking to their seats, and one passenger, who had been in the lavatory, were thrown and received injuries. Both the flight data recorder and the cockpit voice recorder were sent to the NTSB's Recorder Laboratory for readout, and when examined was found to contain information related to the turbulence event. The information showed that the Captain had both provided verbal warning of potential turbulence and had activated the fasten seatbelt sign well in advance of the turbulence event.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: In-flight encounter with turbulence that resulted in injuries to a flight attendant and a passenger.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: CRUISE

Findings

1. WEATHER CONDITION - TURBULENCE

Factual Information

On April 28, 2007, about 0806 Atlantic standard time, an Aerospatiale ATR 72-212 airplane, N407AT, registered to AMR Leasing Corporation, and operated by Executive Airlines, as American Eagle flight 5089, a Title 14 CFR Part 121 scheduled international passenger flight from Nevis Island, St. Kitts and Nevis, to San Juan, Puerto Rico, encountered turbulence while descending to land at San Juan. The airline transport-rated pilot and first officer were not injured, two flight attendants received minor injuries, and one passenger received serious injuries. The airplane did not incur any damage. The flight originated in Nevis Island, the same day, about 0650.

The Director of Flight Safety for Executive Airlines said that a few minutes after the Captain made the announcement to prepare for the approach to land at San Juan, Puerto Rico, he alerted the flight attendants of the possibility of encountering turbulence, and asked that everyone remain seated. According to the Director of Safety, the captain then initiated the descent, and the airplane entered a broken layer of clouds, encountering light turbulence, followed by a momentary "jolt" of turbulence. As the airplane encountered the momentary "jolt", both flight attendants who were walking to their seats, and one passenger, who had been in the lavatory, were thrown and received injuries.

The flight data recorder was sent to the National Transportation Safety Board's Vehicle Recorder Laboratory for readout, and when examined was found to contain approximately 25 hours of data, was in good condition, and included data pertaining to the turbulence event.

In addition, the solid state cockpit voice recorder was sent to the NTSB's Audio Laboratory for readout. The recorder contained two hours of audio information, to include information related to the turbulence event. No anomalies were noted, and the information showed that the Captain had both provided verbal warning of potential turbulence and had activated the fasten seatbelt sign well in advance of the turbulence event.

Pilot Information

Certificate:	Airline Transport	Age:	38, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1	Last FAA Medical Exam:	01/01/2007
Occupational Pilot:		Last Flight Review or Equivalent:	02/01/2007
Flight Time:	6525 hours (Total, all aircraft), 3789 hours (Total, this make and model)		

Co-Pilot Information

Certificate:	Commercial	Age:	24, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1	Last FAA Medical Exam:	10/01/2006
Occupational Pilot:		Last Flight Review or Equivalent:	03/01/2007
Flight Time:	1205 hours (Total, all aircraft), 64 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aerospatiale	Registration:	N407AT
Model/Series:	ATR 72-212	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	407
Landing Gear Type:	Retractable - Tricycle	Seats:	68
Date/Type of Last Inspection:	Continuous Airworthiness	Certified Max Gross Wt.:	48501 lbs
Time Since Last Inspection:		Engines:	2 Turbo Prop
Airframe Total Time:	26428 Hours at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, not activated	Engine Model/Series:	PW127
Registered Owner:	Executive Airlines	Rated Power:	
Operator:	Executive Airlines	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:	American Eagle	Operator Designator Code:	TRBA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SJU	Distance from Accident Site:	
Observation Time:	1200	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	6 Miles
Lowest Ceiling:	Broken / 1800 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26 °C / 22 °C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Nevis Island (TKPN)	Type of Flight Plan Filed:	IFR
Destination:	San Juan, PR (TJSJ)	Type of Clearance:	IFR
Departure Time:	0650 AST	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	2 Minor, 2 None	Aircraft Damage:	None
Passenger Injuries:	1 Serious, 48 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 Minor, 50 None	Latitude, Longitude:	18.433333, -66.000000

Administrative Information

Investigator In Charge (IIC):	John W Lovell	Report Date:	12/20/2007
Additional Participating Persons:	Lee Nieves; FAA FSDO; San Juan, PR		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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